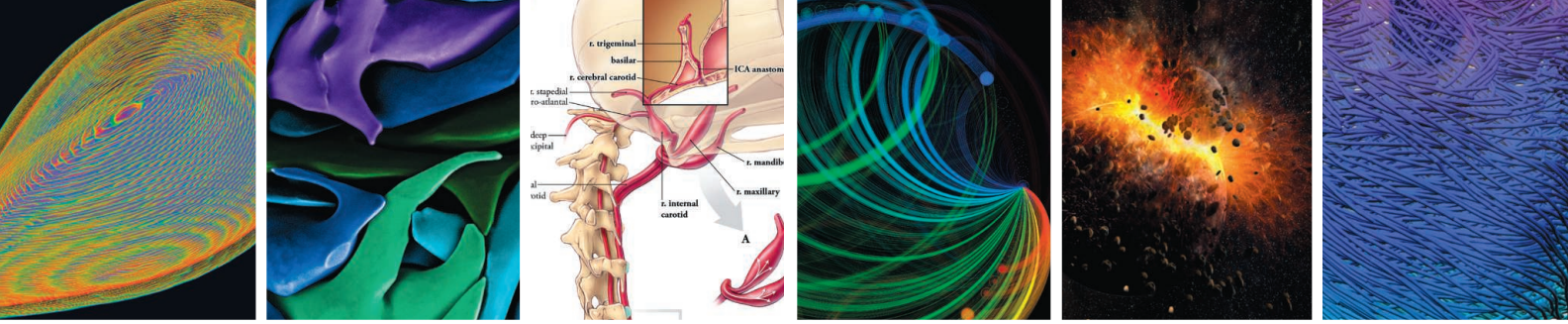

2012 Visualization Challenge

Ten years ago, *Science* and the National Science Foundation (NSF) launched a unique experiment: an international competition to recognize the best examples of projects that bring scientific information to life. The goal was to encourage new ways to visualize data—efforts that are increasingly important for conveying scientific principles and ideas across disciplines and to the general public, and for revealing the hidden beauty of structures on scales from nanometers to the cosmos. The following pages showcase the winners of the 10th in what has become the annual International Science and Engineering Visualization Challenge.

The 10th anniversary winners merge biology and physical science in interesting ways. They include a "wiring diagram" of the macaque brain (featured on the cover of this issue), which inspired a new type of computer chip; a scanning electron micrograph that reveals the crystal structure of a sea urchin's tooth; a poster showing how the owl manages to swivel its head without shutting off blood to its brain; and a video of a computer model of the heart that marries imaging techniques with high-powered computing.

We received 215 entries from 18 countries. A committee of staff members from *Science* and NSF screened the entries. Those selected as finalists were posted on NSF's Web site, and visitors were invited to vote for their top choice in each category. A total of 3155 votes came in; entries that received the most votes were named the "People's Choice." Independently, an outside panel of experts in scientific visualization reviewed the finalists and selected the winners. The winning entries are featured on the following pages, in a slideshow and podcast at www.sciencemag.org/special/vis2012, and at www.nsf.gov/news/scivis. Some entries were put together by large teams, not all of whose members could be listed in print; the online presentations provide more details. Tarri Joyner of NSF organized this year's challenge.

We encourage you to submit applications for next year's challenge, details of which will be available on NSF's Web site, and to join us in celebrating this year's winners.

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